Curriculum: construction and critique? Alistair Ross Falmer

1 Curriculum Gardening

In late 1959 the Central Advisory Committee for Education (England) (chaired by Sir Geoffrey Crowther) reported on the education of 15–18-year-olds. It highlighted the extra- ordinary wastage of talent – largely of working-class origin – caused when children opted to leave school at the age of 15. In March 1960, the House of Commons debated the Crowther Report. The Minister of Education, Sir David Eccles, used the opportunity of the debate to announce a change in government policy towards the curriculum. Up to this time the Ministry had almost exclusively been concerned with the resourcing of education: with teacher supply and remuneration, with school building plans, and with the organization of different types of schools. But in future, Eccles announced, he would also take an interest in what was being taught in the schools: he would 'try to make the Ministry's voice heard rather more often and positively and no doubt more controversially'. He would open up 'the secret garden of the curriculum'.

In selecting this phrase he intended more than to simply draw attention to the covert way in which discussion on the content of education – inasmuch as such discussion existed at all – was almost exclusively confined to professional educators. It had been regarded as their prerogative: an area in which parents, politicians and society at large were not expected to have an opinion. He later suggested that he had in mind a 'commando-type unit' for the curriculum (Kogan, 1978, p. 63). But the metaphor of the curriculum-as-garden is perhaps helpful in beginning an analysis of the school curriculum and the ways in which it is, and is not, changing. This metaphor is not new: Alexander has traced back organic and botanical metaphors as 'an abiding characteristic of the language of primary education' (Alexander, 1988, p. 153).

Gardens are strange institutions. Certain plants are designated weeds, and regarded as intruders: hoed and weeded out, but often showing remarkable tenacity in springing up again. Other plants, often close cousins of the weeds, are highly prized, and nurtured and tended to full growth, even though they may show every disinclination to take effective root, or require particular and difficult-to-achieve conditions if they are to thrive. There may be an analogy here with the different subjects of the curriculum, and with the non-subjects. But perhaps more interesting is the concept of the garden as a whole, its design and purpose, rather than the individual component plants.

What is a garden for? It is perhaps the English tradition of utilitarianism that allows such a question to be asked, but there is certainly no shortage of answers. Gardens may be variously justified: as extensions of nature into the built environment;

as inculcating useful habits amongst gardeners (enabling them to feed their families; or exercise their flabby bodies; or to relax in and recuperate); they may express formal embodiments of the shapes and geometries of the world, as in the baroque garden; or they may be regarded as there because they're there, representing a tradition of English particularism (whether suburban mixture, or country cottage) whose purpose is to distinguish our habitat from that, say, of the French – who have no such preoccupation with the garden, and are thus quite rightly different from us.

Who are gardens for? Do they exist for the benefit of the plants themselves? Some gardens undoubtedly do serve this purposes: Kew Gardens preserves particular varieties, herbaria preserve gene stocks for someone's (or some plant's) posterity. Other gardens exist for the sake of society: public parks that afford recreation, of the body or the spirit. Many gardens exist for the sake of the gardener; while others are maintained for those who own the garden, but who do not labour in it. Market gardens exist for the consumers of their products, while also providing a living for those who work in them, and a profit for those who own them.

Each of these justifications for the garden can also be mirrored in arguments for particular forms of curriculum design, and these purposes provide us with a fresh set of analogies to consider the curriculum. In some cases, the curriculum can be seen to preserve subjects – such as Latin, for example – that many would argue serve no utility and have an uncertain value, against the belief of some others that the future will be ill-served if such a species becomes extinct. More common is the notion that the curriculum exists at the behest of society, and is there to serve society's needs – though determining the extent of the diverse needs of a fragmented society is highly problematic. There are a few teachers who behave as though the curriculum existed for their sakes, and who wish to relock the gate. The State often argues that, as the owner of the educational system, it must be the sole arbiter of its purposes. Social marketeers often hold that schooling and the curriculum must be exposed to the forces of natural selection, where variations will flourish or perish as consumers make their individual choices.

This book explores various arguments for different kinds of curricula. It attempts to summarize and analyse competing models and patterns of what schools and other educational institutions provide. These models have in common the fact that they are all – like gardens – constructed by people: they are social constructions open to criticism and analysis. Gardens classify territory: land is defined with different kinds of frames or boundaries – hedges, pathways, arbours, borders, ditches – each area having its own purpose and system of cultivation – herbs, vegetables, varieties of flowers, grassy areas, and so on. In precisely the same way, Basil Bernstein (1975) has described the classification and framing of the educational knowledge that constitutes the school curriculum: classification is 'the *relationship* between contents ... where classification is strong, contents are well insulated from each other by strong boundaries [while] where classification is weak ... the boundaries between contents are weak or blurred' (p. 49). The garden as a whole is bounded by a framing fence: to Bernstein, the framing of educational knowledge is the 'strength of the boundary between what may be transmitted and what may not be transmitted in the pedagogic relationship' (p. 50).

Four major forms of curriculum will be analysed, each predicated on a different set of assumptions about the purposes and functions of education. Each of these forms is

mirrored by a particular philosophy of garden design in a way that is more than simply metaphor or analogy: the different ideas about the form and purposes of gardens are part of the same cultural movements that expressed different ideas about the structures and objectives of the school curriculum.

The Baroque Curriculum

Early gardens were walled and private places. The first known picture of a garden is an Egyptian papyrus, dating back to about 1400 BC: it shows the symmetrical garden of Nebamun, bounded by a rectangular stone or brick wall. Other classical references to gardens describe them as balanced, trimmed and within walled enclosures (for example, in *The Odyssey*, the gardens of Alconous and of Laertes). This tradition is carried through to the medieval garden, typically geometrically arranged, with square beds, hemmed in by rectilinear hedges (or pergolas, trellises or arbours), each planted with a particular crop of herbs, flowers, fruit or vegetables.

Walled gardens are reflected in the walls of academia, even today: in our older universities, miscreant students may still be 'gated', or kept within the high walls that surround the College. And university activities that take place beyond the undergraduate/post-graduate spectrum are significantly called 'extramural studies': beyond the walls.

This form of garden perhaps reached its peak in the baroque and rococo gardens of continental western Europe in the seventeenth and eighteenth centuries. The key features of this form of garden are its enclosure within a strong frame, defining what is within and without the garden, and ideas of balance, regularity and symmetry, so that the forms of plants themselves are trimmed and shaped into idealized and often classical forms. Each bed or area has its own specialist function, with its own traditions and forms of cultivation. This is the curriculum of clearly demarcated subjects, classified by both content knowledge and by the discourse forms appropriate and specific to each discipline. Such strongly framed curricula have what Bernstein distinguishes as a 'strong collection code' (1975, p. 50).

As in the baroque garden, where selected species are not only specific to particular areas, but must be cultivated in certain ways and trained into special shapes, in such an academic curriculum (Goodson, 1988) the 'strong framing' allows the learner 'little control over the selection, organization and pacing of transmission' (Bernstein, 1975, p. 179). In Sir Francis Carew's massively-walled garden at Beddington Manor fruit trees had their natural cycle repressed, so that when Sir Francis entertained Elizabeth I he was able to lead her 'to a cherry-tree, whose fruit he had of purpose kept from ripening at least one month after all cherries had taken their farewell of England: he had done this by putting on a canvas cover and keeping it damp' (Platt, 1608, quoted in Thacker, 1979). Another example is the formal gardens designed by Nicolas de Pigage at Schwetzingen, which were being established in the 1750s when Voltaire stayed there as guest of the Elector Carl Theodore while he wrote Candide. The balanced formality of these gardens is reflected in the idea of a curriculum in which distinctly bounded subjects, limited in number, are 'balanced' against each other, and in which each retains and preserves its unique processes and form of knowledge. Such curricula are considered in Chapter 7 of this book.

The Naturally Landscaped Curriculum

There was a perhaps inevitable revolt against such a style of garden as unnatural. The formality and artifice of the baroque was rejected in favour of the landscape garden, as expressed by the character Theocles in Shaftesbury's *The Moralists* (1709) when he speaks of:

The Genius of the Place ... I shall no longer resist the Passion growing in me for Things of a natural kind; where neither Art, nor the Conceit or Caprice of Man has spoiled their genuine Order, by breaking in on that primitive State. Even the rude Rocks, the mossy Caverns, the irregular unwrought Grotto's, and broken Falls of Waters, with all the horrid Graces of the Wilderness itself, as representing NATURE more, will be the more engaging, and appear with a Magnificence beyond the formal Mockety of Princely Gardens.

This was echoed in Joseph Addison's articles in *The Spectator* in 1712: his objections to topiary and the mathematical figures of the formal garden, in which 'we see the marks of the Scissars upon every Plant and Bush' (25 June 1712); his delight in his own irregular garden, 'a confusion of Litchin and Parterres, Orchard and Flower Garden ... a natural Wilderness' (6 September 1712).

The landscape garden was made possible by the invention of the ha-ha, 'a technological advance in the craft of gardening which is quite exceptional' (Thacker, 1979, p. 181). Instead of the boundary fence, a raised enclosing barrier, the ha-ha is a dry ditch, a sunken barrier, which creates an illusion that the garden and the surrounding countryside are a unity. In curriculum terms, this creates the impression of 'a weak boundary between what may and what may not be transmitted' (Bernstein, 1975, p. 50). Such a curriculum claims not to be governed by the artifice of subjects, but by the nature of the learner. Subjects are portrayed as artificial, dividing forms of knowledge with contrived distinctions of process, knowledge and procedures.

The natural garden and the natural curriculum are directly linked in the person of Jean-Jacques Rousseau. In La Nouvelle Héloise (1761) he attacks the formality of French gardens (such as those at Versailles) and extols 'Julie's garden', which appears to grow spontaneously, without fixed lines, and is bounded by concealing thick trees and bushes. Nature, uncontaminated by society and social forms, is equivalent to virtue; society is corrupt, and civilization a harmful constraint. This theme is replicated in his writings on education: in Emile (rep. 1964) he propounds a system for education based on the child's unfolding nature, rather than on the requirements of a pre-established adult-centred cultural system. For example, Emile's understanding of mathematics and his language skills are developed by the artful and well-informed teacher, who exploits the situations of everyday life to find meaningful contexts for learning. Although a devastating attack on educational traditions - a 'romantic iconoclast attitude towards the values and rules of traditional culture' (Skilbeck, 1976) - the regime that Rousseau proposes is in fact highly structured, orderly and disciplined. The apparent freedom of the learner is conditioned by the constant surveillance of the teacher, which makes this difficult to reconcile with 'natural' learning.

The learner-centred curriculum, the subject of Chapter 9, fails to recognize that in

any society, even one of two people, there can no longer be a 'natural' state or 'natural learning', and that the idea of society as a virtuous state of nature is chimerical. The same is true of the landscape garden: far from being natural, it is constrained, in its own way, by the prejudices and beliefs of its designer, and the ha-ha only gives the *illusion* of unity with the countryside; it is in functional terms as substantial a border as the wall or hedge. The 'seamless robe' of knowledge necessarily retains some notion of boundary and subject division, simply by virtue of being knowledge, because the making of knowledge is a social process that involves categorization and labelling. This generalization in itself is an act of boundary-making.

The artificiality of such 'naturalistic' settings is evident in the methodology of the most well-known landscape gardener, 'Capability' Brown. After working at Stowe, one of the first landscaped gardens, he set up in 1751 as a freelance garden designer. When asked to give an opinion on the possibilities of landscaping a property, he was supposed to have invariably replied that, were he given the task, the land in question had 'capabilities' which he might be able to mould and make distinctive. Thacker's analysis is that his best work was 'the development of the latent capabilities of a site, the natural potential of a scene ... the inspired detection, analysis and encouragement of the genius loci, the "spirit of the place"' (1979, p. 209). Making decisions about what is 'natural', and then constructing this vision, is pure artifice, however aesthetically pleasing it may appear. In just the same way, a curriculum formulated on notions of natural personal growth and development may be perceived as rewarding (to teacher and to learner), learner-centred and empowering, but is as much socially constructed as the subject-centred, traditional academic curriculum.

Capability Brown's name also has resonances with current ideas of a 'capability curriculum', but this latter is in reality part of a quite different curricular tradition, that of utilitarianism, analysed in Chapter 5. There is also, of course, a parallel tradition of utility in gardening design, which I here describe as digging for victory.

The Dig-for-Victory Curriculum

The baroque garden and the landscape garden are both large-scale, owned by and designed for the rich (who do not themselves, however, provide the labour for maintaining the garden, other than in the symbolic play of Marie Antoinette in the Petit Trianon). Most gardens are much smaller, and are today owned, designed and cultivated by individual families. They are often seen in utilitarian terms, sometimes providing food, sometimes a pleasing place in which to relax, sometimes a way of indulging in recreational manual labour.

The curriculum of educational institutions can also be interpreted and designed to meet very similar functions. The idea that the curriculum must in some way be useful, and in particular that the learning that takes place in schools must in some way prepare children for their future roles in work and in society is not new. Jamieson and Lightfoot (1982) point to the continuing debate on the relationship between schooling and industry dating back to the 1851 Great Exhibition. The comparative economic decline of the United Kingdom, over the past twenty years in particular (and over the past 150 years more generally), has been analysed as a consequence of inappropriate schooling, that prefers 'academic' non-industrial, or even anti-industrial, values over

the acquisition of 'useful' skills. Wiener's now classic thesis in English Culture and the Decline of the Industrial Spirit 1850–1980 (1981) had a very significant impact on the shaping of the UK curriculum in the 1980s (Lawton, 1994; Ross, 1995b). It was argued that there was a skills deficit in the workforce, and that this led to relative incompetence in production. The existence of this skills deficit was attributed to an inappropriately focused, weakly directed and poorly delivered school (and post-school) curriculum.

This view of the curriculum, explored in more detail in Chapter 8, requires the structure and content of education to be directly relevant to the needs of (adult) society, and in particular to the needs of employers. There is continuous and increasing emphasis on international comparisons and league tables, in terms of percentages of young people obtaining training qualifications, in terms of ability in various forms of mathematics and of attainment of scientific knowledge, which are then related to levels of industrial output and national income. The crisis that has been generated has generated a response, particularly since James Callaghan's speech at Ruskin College in 1976, which has analogies with the crisis in food and raw materials shortages of 1939. A large proportion of the nation's food had been imported up to that date, and this supply was then threatened by Axis naval attacks on supply convoys. The response was to divert attention to controlling consumption and to increasing domestic supply. 'Dig for Victory' was the slogan that led to domestic gardens being turned over to vegetables on a large scale, absorbing effort and resources into what was a relatively inefficient and small-scale contribution to food stocks (and increasing demand from households for seeds and gardening equipment, which caused a shortage) (Calder, 1969, p. 496).

The idea that gardens must have a useful purpose has been further extended as the leisure time of the population has increased. Gardens now become both a place in which people can relax, and a place in which they can take useful exercise. This is mirrored by the proliferation of recreational adult education classes through the 1960s to 1980s: courses in leisure pursuits, fitness classes, and the like. Gardens have also become part of consumerism, and are now places in which consumption can be conspicuously displayed, but this aspect of gardening has unfortunately not been mirrored in the staffing, equipping and general resourcing of the nation's schools.

The utilitarian view of education has wider implications than pure instrumentalism. It is reflected in behavioural models of learning, which lead to movements to pre-specify learning 'objectives', and thus to rate some objectives as more useful than others. Through refinement in cultivation and training techniques, it becomes more possible to predict the effects of both gardening and teaching. We know better when plants will bloom or fruit, how large they will grow, and can thus determine the future desired appearance in a way not possible before.

The Cottage Curriculum

Most of our gardens will not exactly fit any of the above models. The typical contemporary English garden is often a higgledy-piggledy mix, with a semi-formalized lawn and herb beds intermingled with vegetables, flowers and fruit. Such gardens are largely the way that they are now because this is the way they were thirty, fifty or a

hundred years ago. The suburban garden largely attempts to reproduce this 'heritage' view of the garden, with a rather more evidently planned mixture of the formal (lawns, patios, pergolas), the landscape (ponds, waterfalls, irregular shapes and even garden gnomes) and the utilitarian (the vegetable bed, potting shed and compost heap). Challenges to such garden designs are almost pointless. They are a mixture of styles that is not simply traditional, but ossified in form and function to the point that the reasons for their existence are simply because they have always been like this: change them, and they no longer fall within the category of 'garden'.

The contemporary curriculum is very much like this: a preservation of cultural forms achieved through time-honoured processes, resistant to challenge or criticism. But these forms of curriculum, just as much as the baroque curriculum, the landscape curriculum and the utilitarian curriculum, are socially constructed, the result of competing claims to truth, of bargaining and negotiation. Very often this arbitration is unseen, even by those engaged in it. Sheltering behind notions of common-sense, tradition, ideas of 'natural' learning, possessive individualism, instrumentalism and the norm, the curriculum appears to evolve and to emerge – like Topsy, 'it just growed'. But this appearance of a natural process at work, akin to natural selection, is deeply misleading. This book will analyse purposes, forms and constructions of the curriculum within the social context.

The discussion will focus on the nature and purposes of the curriculum. But teachers are more than simply busy people: they have a class to teach at nine tomorrow morning, and will necessarily have to deliver some sort of curriculum. A curriculum must be taught, just as a garden must be dug. Voltaire's protagonist, Candide, spends most of the novel in pursuit of the meaning and purpose of life: in the end – in the final words of the book – he dismisses all of that which has gone before as mere metaphysical speculation: Cela est bien dit, répondit Candide, mais il faut cultiver notre jardin ("That is well said," replied Candide, "but we must cultivate our garden") (Voltaire, 1758). Both the gardeners at Schwetzingen and teachers must, like Candide, get on with the business of living. Nevertheless, it is important that teachers analyse and justify what they cultivate, and the ways and directions in which they plan, prune and train their charges. In one sense it matters less whether gardens are secret or open to unlimited public access, than that it is recognized that they do not just grow of their own accord; they are designed and nurtured to achieve some desired effect. The nature of that design is too important to be left to habit – or to the politicians.

Note

1 A personal footnote: Beddington Manor was used as part of the Grammar School at which I began my secondary education in 1957, along with Chris Woodhead, who is now responsible as head of OFSTED for the enforcement in England and Wales of the current baroque curriculum. The curriculum that we endured together over the following seven years reflected the ordered beds of Carew's gardens and the training of plants into particular paths and forms. There was intense competition by the teachers of different disciplines for the allegiance of the pupils to specialize in 'their' subjects.

2 What is the Curriculum?

Everyone believes that they know what other people should learn. Though they might not be able to express the precise detail, they could certainly advance the categories, whether in terms of bodies of knowledge, skills, or by an appeal to a higher or 'more educated' authority. The fact that defining the curriculum, like much of education, is seen by many to be part of 'common sense' does not make it any easier to engage in debate about purposes and priorities.

This chapter will explore the hegemonic relationship exerted by culture through the curriculum, relating this particularly to the ways in which a curriculum might be assessed. Global manifestations of curriculum form will be described, which suggest that an international curriculum form is emerging that is perhaps related to the near-ubiquity of a liberal educational culture: but the particular curricular history of the United Kingdom (which will be analysed in Chapters 3 to 5) suggests that there are at least some local resistances to the global form, deriving from particular and diverse ideologies.

A curriculum is a definition of what is to be learned. The origins of the word are from the Latin curriculum, a racing chariot, from which is derived a racetrack, or a course to be run, and from this, a course of study. The term is often confined to formal definitions of what is to be taught in specific institutions - perhaps even as narrow as the notion of a National Curriculum that confines its coverage to the prescribed content of learning during the years of compulsory education. But even within compulsory education, it is also possible to refer to the 'hidden' curriculum: that which is not overtly stated, and which may be unintentionally passed on through the processes of education. Beyond this, curriculum exists in much wider domains, and it can - and perhaps should - include any socially constructed or prescribed activities, selected in some way from the culture of that society, that result in the transformation of the individual. It is possible, for example, to refer to a curriculum for parenting, in that in contemporary society there are a range of activities that, formally and otherwise, construct individuals as parents. These include formal learning activities (prenatal classes, parenting classes), structured open learning (magazines and books on bringing up babies and children), informal learning (from relatives and neighbours), and responses to pressures from producers (to behave in a particular manner, conform to a particular image and (in particular) to consume particular goods or services), all of which together constitute a curriculum for parenting. Though such a curriculum appears to be purely voluntary and informal, it is in fact governed not only by the

socially accepted view of what constitutes 'good parenting', but through a series of laws such as the Children Act and Education Acts requiring parents to ensure the education of their children, and influenced by strictures from politicians and others about what they see as appropriate parental behaviour.

Perhaps the best brief definition of curriculum was that offered by HM Inspectorate (HMI) in 1985 as a contribution to the then current debate on curriculum aims:

A school's curriculum consists of all those activities designed or encouraged within its organisational framework to promote the intellectual, personal, social and physical development of its pupils. It includes not only the formal programme of lessons, but also the 'informal' programme of so-called extracurricular activities as well as all those features which produce the school's 'ethos', such as the quality of relationships, the concern for equality of opportunity, the values exemplified in the way the schools sets about its task and the way in which it is organised and managed. Teaching and learning styles strongly influence the curriculum and in practice they cannot be separated from it. Since pupils learn from all these things, it needs to be ensured that all are consistent in supporting the school's intentions.

(DES, 1985a, para. 11)

This is a very broad conceptualization, but one that properly emphasizes that anything that schools do that affects pupils' learning, whether through deliberate planning and organization, unwitting encouragement, or hidden and unrealized assumptions, can all be properly seen as elements of the school's whole curriculum.

While most of this book will be concerned primarily with the overt curriculum, within formal educational institutions, it is important to bear in mind that this is one end of a spectrum of activities, and that, even within such institutions, many of the processes of teaching and learning take place outside the prescribed content. It has been argued that many of the aspects of schooling that are outside the material of lessons are more important than that material itself: uniforms and uniformity, timekeeping, subservience and obedience, the acceptance of orders and of roles imposed by others, social stratification and hierarchies - all of these, it has been held, are calculated to induce those behaviours and attitudes in adult life that are necessary to serve the needs of (capitalist) employers for a docile and tractable workforce (for example, Bowles and Gintis, 1976). Conversely, it has also been observed that the pupils' own counter-cultures - which are often created and transmitted within the boundaries of the schooling system - can sometimes be more powerful mechanisms for learning than any outcomes that were intended by the system's formal controllers, whether this was to produce complaisant workers or to transmit formal knowledge (Willis, 1977). Chapter 6 will explore further some of these arguments.

Curriculum and the Reproduction of Culture

One of the key issues in the analysis of curriculum, which will be a running theme through this book, is how a selection is made from a society's culture of the material

that is to be included in the curriculum – what is chosen, by what processes, by whom, with what intent and with what result. Basil Bernstein suggested that 'how a society selects, classifies, distributes, transmits and evaluates the educational knowledge that it considers to be public reflects both the distribution of power and the principles of social control' (1971a, p. 47), from which list the selection, classification and evaluation of particular knowledge are central to the definition of a curriculum. This is not a simple or deterministic model of social and cultural reproduction of the dominant ideology. There are many detailed studies of the growth of particular disciplines within the curriculum that suggest the processes are considerably more complex (e.g. Goodson, 1984a; Whitty, 1985; Layton, 1972).

There are two particular issues of cultural reproduction that are of note at this stage.

First, society is no longer - if it ever was - possessed of an unmistakable and clear culture: we are now increasingly aware of a range of multiple cultural identities, each with its own necessary cultural impedimenta, from which individuals make their own selection. The individual constructs and projects a particular range of identities, utilizing an appropriate set of discourses. These cultural repertoires arise from constructions of ethnicity, gender, class, age-sets, sexual orientation and the like, and are often mutually exclusive. While individuals can adapt to their immediate chosen context and discourse - displaying different cultural traits, using specific language, selecting particular and specific identities - this can appear much more problematic when we are asked to do it on the scale of selecting a set of cultural attributes for conscious transmission, through the curriculum. The plurality of our society means that children come from a range of cultural backgrounds: they may come from different ethnic origins, have (or have parents of) different faiths, different attitudes, beliefs and experiences concerning gender and sexual orientation, come from homes with widely varied experiences of the nature of work, have different expectations of the efficacy of political systems. To make a selection for transmission through the school curriculum will necessarily be contentious, and the greater the scope of a curriculum definition - for example, at national level - the greater the degree of contention. There is a necessary tension between the narrowest of possible curricula and the widest. The narrowest would probably be a curriculum that was directly and exclusively selected from the culture of the parents or guardians of the child, in which the cultural reproduction of schooling directly mimicked the biological reproduction of the genes: few would argue for such a ghettoized curriculum, even if it were possible to deliver. But a national curriculum requires someone, somehow, to rule that certain cultural artefacts (selected, by very definition, from particular cultures) should be elevated to be passed on to all children, and that other cultural manifestations be excluded from formal education, even though they will probably be the principal cultural determinants of many children in the system. This leads to the second potential problem with simple cultural reproduction theory.

The very analysis articulated by Bernstein in the early 1970s has, in itself, altered the nature and processes of curriculum description. As with many aspects of the social sciences, the description and broadcasting of a social rule means that it becomes possible consciously to manipulate the situation that the rule purports to describe, and, at least to an extent, the generalization that the rule represents is no longer valid.

Once a policy-maker grasps that the act of defining the curriculum is a conscious selection of which culture shall be transmitted to the next generation, then it becomes possible to reverse the process: to decide what form of culture (or society) will be desirable in future, and to ensure that it is this which is included in the curriculum. For example, if a group of curriculum-makers feel that individuals should be more enterprising and responsible for their own social and economic progress, then they can ensure that the curriculum includes themes that emphasize individual initiative, that prioritize individual duties and obligations over social and communal rights, and that put a high value on entrepreneurial activities in schools (Ross, 1995b). If curriculum-makers are concerned that their society is losing its sense of identity, then they can manipulate the curriculum so that – in the words of Nick Tate, Chief Executive of the Schools Curriculum and Assessment Authority for England and Wales – its key function becomes

the explicit reinforcement of a common culture. ... Pupils first and foremost should be introduced to the history of the part of the world where they live, its literary heritage and main religious traditions ... the culture and traditions of Britain should be at the core. Seen in this light, the central role of British history, Christianity and the English literary heritage are axiomatic.

(Tate, 1994)

If, as Tate goes on to argue, 'a national curriculum ... plays a key part in helping society maintain its identity', then it is possible for those who have views about what that social identity should be to set out to construct a curriculum that does not just reproduce the existing diversities, dichotomies and contradictions in society, but produces the new order that they seek. This discussion on the role of the curriculum in creating a national (or other) identity will be returned to in the final chapter of this book.

The curriculum can be construed in this way as a way of constructing both individuals and society. The individual and society are created, by the processes of the curriculum, as related parts: society as composed of a set of individuals; individuals as existing through a set of social references; and society and individuals in contradistinction to each other. The curriculum is, therefore, a social construction, as individuals and societies decide what constitutes the processes and contents of the construction. The inevitable tension lies in the differences between what an individual learner (or their parent or guardian) might want from a curriculum and what a much wider social grouping might want — or indeed, what a narrower and more powerful group, such as a curriculum authority, might want.

Curriculum and Assessment

One of Bernstein's key processes was the evaluation of educational knowledge. The mechanisms for assessing the curriculum often reveal as much about the motivations and ideologies of the educationally powerful as they do about the efficacy of the learning that has taken place. Decisions about what to assess, about why the assessment is to take place, and about how to conduct assessment are usually framed within

the language of maintaining and improving standards, but this very often masks ways in which power is selectively transmitted to the next generation. Whatever the reasons for which assessment is carried out, however, it is clear that any kind of assessment has very far-reaching consequences for the nature of the curriculum, and consequently assessment is invariably seen as an aspect of curriculum design, rather than an independent variable. The dangers of this have long been apparent: the Spens Report (Board of Education, 1938) quoted a Board Circular (1034 of March 1918) that set out as 'a cardinal principle that the examination should follow the curriculum and not determine it': Spens also noted 'in practice, this principle has been reversed'. However much it is argued that assessment should be curriculum-driven, it seems almost inevitable that, even at the most straightforward level, it is inevitable that 'teaching for the test' will happen — that the curriculum is assessment-driven (Gipps and Stobart, 1993).

If an educational system is designed to be selective - to act as a filter - then assessment systems must be devised that only allow the necessary number or proportion of people to pass through to the next stage. Much of the educational system in Britain, and employers generally, demand that assessment (and thus the curriculum) be designed to select those students who are 'fitted' for further and more advanced study, or for particular employment needs. Such assessment systems must be normreferenced; that is, the qualification level is related to the group taking the test. The old eleven plus examination system is an example of this: since there were, in a given area, only a fixed number of grammar school places, only that number could be awarded a pass. In a 'good' year, children would need to achieve a higher mark than would be necessary in a 'poor' year. Moreover, since girls as a group consistently outscored boys, and since it was held that an approximately equal number of each sex should receive grammar school education, the pass mark for girls was generally fixed at a higher level than the pass mark for boys. Other examinations also act as filters, though they are designed not to be norm-referenced: GCSE examinations filter students into sixth-form and FE college study; A levels filter students into degreelevel study - even though the correlation between A-level results and degree classifications is only 0.4. University education, in principle 'available to all those who are qualified by ability and attainment' (UK, 1964), is in practice limited to those with the best ability to demonstrate their ability and attainment, because the number of places for study are limited.

The effect on the curriculum is to value processes and content that are amenable to grading. This can mean that a curriculum is, at least in part, determined by its ability to filter: knowledge and skills (traditionally knowledge in particular) that are relatively inaccessible are given a more important place, because they will make it easier to construct filters that achieve the desired result. The use that was made of the study of classical languages is an example of this: irrespective of the merits of learning Latin and Greek, proficiency in one or both of these languages was used as a way of filtering applicants to University and to careers beyond this. A classical education, to degree level, was an important requirement for recruitment to the administrative level of the colonial civil service, for example. It was argued that a successful mastery of the discipline of such education provided an assurance of the calibre of the individual to deal with the exigencies of the job, and indeed, the correspondence and reports of such

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Of course, it can be argued that mathematical and scientific knowledge is useful, in particular in contemporary society with its dependence on technology, and that this is why such forms of knowledge have now, rightly, acquired such high status. This leads to the second broad set of purposes of an educational system: to provide the necessary skills that will be useful to individuals, both in their immediate and future roles in society. This in turn requires an assessment system that can certify that a particular competence or level of knowledge has been reached: a criterion-referenced assessment. Such a system allows for the vagaries of a 'good' or a 'bad' year of students: all those who reach the standard will be awarded the grade, and only those students. It would be theoretically possible for all students to meet the required grade, or all to fail, in any given period. The argument for such testing is not simply that it is fairer and unambiguous: such assessment is related solely to the ability of the student to demonstrate that they can do or know something, irrespective of any other person's competence at the same task. The driving test or a swimming test are both simple examples of criterion-referenced tests. Once a description of the abilities necessary to be 'able to drive' or 'able to swim' have been determined, then one has only to meet these criteria to pass. There is no reason why virtually everyone should be able to eventually learn to drive, or be able to swim. In terms of utility for employment and adult life, the advantages of such assessment are that one can, in theory, determine the skills and knowledge needed for a particular task, and then demonstrate competency at the necessary level. But it could be argued that an employer (or an educational institution recruiting) would find this system unhelpful, in that they find it easier to select on the basis of a norm-referenced system: they will take those judged best at a particular attribute, not those sufficiently able to perform the task successfully or take the educational course with advantage.

The effect of criterion-referenced assessment on the curriculum is to place special emphasis on measurable competencies. In practice, the setting of strict criteria may be too difficult, and the device of 'grade descriptors' (or 'level descriptors') is often used: an account of the standards expected of students reaching each grade. GSCE examinations were reorganized along these lines in the late 1980s, and have been

followed by criterion-referenced National Vocational Qualifications (NVQs). These latter establish levels of abilities, and have marked a shift in the curriculum away from the idea of knowledge to one of competency: content becomes less important than standards of achievement, curriculum is defined in terms of desired outputs, rather than of inputs and processes, and competence itself is related to the whole work role. In these curriculum descriptions knowledge is usually closely linked with understanding, rather than being identified in its own right: this can be seen perhaps as lowering the status of knowledge. Given that many sociologists of knowledge (from Berger and Luckman, 1966, onwards) have argued that knowledge consists simply of perceptions of reality, heavily filtered through cultural constraints, and thus that all knowledge is relative, this process may be seen as an opening up, or freeing of the curriculum from particular elite cultural forms. But competencies are themselves constructs, and can only be assessed through observation, so that one set of cultural filters may merely be replaced by another (Wolf, 1995).

A third set of assessment purposes may be seen in what Gipps and Stobart (1993) distinguished as the managerial functions of assessment. While a professional assessment may be concerned with providing teachers with useful diagnostic material, with screening to detect special needs, or providing material that helps in record-keeping, managerial assessment is designed to produce data that will allow the comparison of teachers', schools' and local education authorities' performances. Assessments that produce direct comparisons over a wide range of the population are rarely sufficiently finely tuned to produce diagnostic feedback, or to provide more than the most crude ranking for the individual child, but do allow league tables to be constructed that – if everything else were equal – allow the direct comparison of the 'standards' or 'effectiveness' of different schools and LEAs. What effect will such assessment have on the curriculum? The introduction of this kind of assessment occurred in 1862 in England and Wales, when the revised code made teachers' salaries dependent on the results their pupils achieved, which resulted in an extraordinary narrowing of the curriculum to focus very largely on the tested elements.

The reasons why assessment is carried out thus have a very powerful effect on the content of the curriculum, and are very much associated with what are seen as the overall purposes of education, whether these are to limit the group who will have access to power in the future, or to ensure that individuals are educated towards particular levels of competence, or to enable individuals to gain access to as wide a range of knowledge and abilities as they are able to do.

Global Trends in School Curricula

The diversity of the ideologies that seek to create curricula might be expected to result in a great diversity of curricular patterns around the world. It would not be surprising to find some societies with wholly utilitarian curricula, geared closely to the local means of production, and other societies which valued and taught particular cultural forms to a stratified elite.

An important study of world-wide trends in the curriculum suggests that this may not be so. John Meyer's team at Stanford University has looked at the curricular categories used in primary education in over seventy countries since the 1920s. Instead of diversity, they discovered 'an extraordinary homogeneity across the extraordinarily variable countries of the world' (Meyer et al., 1992, p. 6). Comparing nationally-provided accounts of curricular provision, it was perhaps not surprising that local influences on the curriculum appeared to be unimportant, as mass education overrode local cultural content: what was unexpected was the degree to which national pressures were also apparently unimportant, and that the broad similarities between curricula greatly outweighed the differences.

Meyer's team took official data from a variety of government and international sources, and from these analysed descriptions of the curriculum into broad categories, looking both at the lists of subjects taught and the percentage of total instruction time given to each subject. In some countries, they were able to trace accounts back into the earlier part of the nineteenth century; in other cases, they were looking at the educational systems of nations that have only achieved statehood since the 1960s. Admittedly the data is limited and superficial: it is not possible to discover what a particular curricular category might mean in any given country. There could be significant variations in the syllabus, in teaching materials, in pedagogy or in assessment; the implementation may differ from country to country, and it is possible that the category may in practice mean very different things for different children, when differentiated, for example, by class, or gender or ethnic grouping. But having allowed for all these caveats, their data still suggested that 'the labels, at least, of mass curricula are so closely tied to great and standardised versions of social and educational progress, they tend to be patterned in quite consistent ways around the world' (p. 166).

The world curriculum that they describe has changed through the period of their analysis, and local national variations have been ironed out as a pattern of international conformity has prevailed. The professionalized or 'tamed' curriculum generally now consists of

- One or more national languages (no longer classical languages): the reality of the nation state is that local languages and dialects are relatively downgraded in the teaching of a nation-wide language. What variation that there is in language policy tends to be on matters such as which languages are to be regarded as national or official; how much use might be made of local languages or mother-tongue teaching in the early part of the elementary school; the methods and emphases used in language teaching; and whether and how to legitimize local languages. Very few systems now include at their core the study of classical texts or sacred moral texts (Cha, 1991).
- Mathematics is now found universally in educational systems: it has become 'a critically important element in the rationalistic modern world' (Meyer et al., 1992, p. 12). In some states in the nineteenth century, mathematics had been seen as either a speciality for an elite group, or as particularly necessary for those entering trade or commerce: now mathematics is seen as a requirement for everyone, and controversy in mathematics education is confined to matters of technique or emphasis (Kamens and Benavot, 1991).
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the language of maintaining and improving standards, but this very often masks ways in which power is selectively transmitted to the next generation. Whatever the reasons for which assessment is carried out, however, it is clear that any kind of assessment has very far-reaching consequences for the nature of the curriculum, and consequently assessment is invariably seen as an aspect of curriculum design, rather than an independent variable. The dangers of this have long been apparent: the Spens Report (Board of Education, 1938) quoted a Board Circular (1034 of March 1918) that set out as 'a cardinal principle that the examination should follow the curriculum and not determine it': Spens also noted 'in practice, this principle has been reversed'. However much it is argued that assessment should be curriculum-driven, it seems almost inevitable that, even at the most straightforward level, it is inevitable that 'teaching for the test' will happen — that the curriculum is assessment-driven (Gipps and Stobart, 1993).

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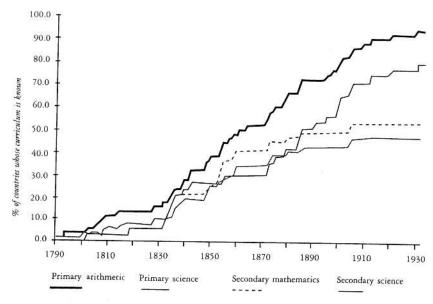
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mathematics became mandatory in different countries, as is seen in *Figure 2.1* (see also Kamens and Benavot, 1991). The process began, it seems, in the primary curricula of European countries, and then spread around the world.

- The fourth curricular area that is found in all of the survey nations was some form of *social science*. This core area was generally taught either under the combined social studies rubric, or divided into separate subjects, such as history, geography and civics. The social world, like science, seems to be presented as having 'factual evidence and law-like properties' (Meyer et al., 1992, p. 12), taught not just to an elite group but to all future citizens. Wong (1991, 1992) has shown that the variations in social science teaching are greater than those in language, mathematics and science, and concern issues of categorization and organization as social studies gradually supplanted the separate subjects of history and geography (though this may be a trend that has recently been put into reverse) (Ross, 1996).
- Aesthetic education (in art and music) and physical education are not quite so ubiquitous as the four areas described above, but are still found in over 95 per cent of all national curricula.

Table 2.1 summarizes both the proportion of countries including various categories in their curricula, and the percentage of time given to each: Meyer et al. conclude that in

Figure 2.1 Dates at which mathematics and science were first made compulsory in the school curriculum, shown as a percentage of countries



Source: Derived from Kamens and Benavot, 1992 (in Meyer et al., 1992), Table 8.1, pp. 105-6.

subject area after subject area ... controversy is limited – matters of outline are settled, and national society is rooted in modern culture through universal socialisation schemes. True conservative protest, which might object to the whole system as an intrusion on the natural properties of society and communal life is dead ... radical protest ... focus more on styles of instruction ... than on content categories.

(1992, p. 13)

The data are not watertight – the categorizations may well conceal major variations in intention and in practice, and the sources used may well have put strains on responding government departments to make their practice 'fit' the requirements of the various surveys that were conducted. But the general conclusion is that there is what Ivor Goodson has described as an 'aggrandising world rhetoric' that has shaped the curricula of most countries (preface to Meyer et al., 1992, p. x).

This does not, however, mean that analysis of the curriculum is inevitably confined within curricular category boundaries. Questions of cultural transmission and utilitarianism, of child-centred or subject-centred emphases are still valid. General world conceptions of curricula are not, it will be suggested, as hegemonic as Meyer's team seems to suggest, and more local forces still have a pervasive influence on the forms and purpose of the curriculum. Such local forces are particularly to be found in the shaping of the United Kingdom's school curriculum, especially in the curriculum in England and Wales, where, it will be suggested, there is a relative impermeability to international trends and forces in education. The next chapter will therefore survey some of the major changes in the English and Welsh curriculum, identifying the variety of forces at work, and the interests that they might represent. It may well be that very similar interests are to be found in the creation of the curricula of other nations.

Table 2.1 Subjects and percentage of time given to them, 1970-86

Subject	% of time given	% of countries	N
Language: (all)	34	100	73
national, local	25	92	75
official, foreign	8	61	74
Mathematics	18	100	82
Natural sciences	8	100	78
Social sciences	8	100	76
History, Geography, Civics	3	53	76
Social studies	5	61	76
Aesthetic education	10	99	76
Religious or moral education	5	75	76
Physical education	7	96	76
Health/hygiene education	1	42	76
Vocational or practical education	5	68	75

Source: Derived from Benavot et al., 1992 (in Meyer et al., 1992), Tables 4.1 and 4.2, pp. 47, 49.